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Approved For Release 2004/05/05 : CIA-RDP78B05171A000600010101-1

NPIC/TSSG/RED/SDB-007-70
2 February 1970

MEMORANDUM FOR THE RECORD

SUBJECT: Power Requirements for 1540 Light Tables

1. This memorandum outlines the expected power requirements of the [redacted] 1540 Prototype Light Tables. The [redacted] table is expected to require 8-9 amps supply current maximum while the [redacted] is expected to require up to 15 amps maximum. 25X1 25X1 25X1

2. The estimated requirements for the [redacted] tables follow: 25X1

Light Sources (approx. 5a each)	= 10a
Tilt Drive System	= 1a max.
Elevation Drive System	= 1a max.
Film Drive System (1a. max each)	= 2a max.
Power Supply for Clutches, Brakes, etc.	= 1a max.
Total	= 15a max.

However, operation in all those modes simultaneously is decidedly abnormal. Estimated required current under normal operating conditions is 10.5 to 11.5 amps.

3. Attached is a tentative Installation Engineering Data sheet supplied by [redacted] It should be noted that section III, B.1. implies a semi-controlled environment for the operation of these tables. [redacted] states that although the tables do not require a controlled environment, the wordage of the Data Sheet is "desired environment". Therefore, the stated requirement is what [redacted] would like, and not what the table requires. 25X1 25X1 25X1

[redacted] 25X1
Project Monitor
NPIC/TSSG/RED/SDB

Distribution:
Original - Route & File
1 - NPIC/TSSG/SSD/LB
1 - NPIC/TSSG/RED/SDB

Declass Review by
NIMA/DOD

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INSTALLATION ENGINEERING DATA

Date form completed 1/29/70

(See Remarks at end of form)

Tentative ✓ Valid until _____

Final data ☐

I. INSTRUMENT

A. Name of instrument: 1540 LIGHT TABLE

25X1 B. Manufacturer: [redacted]

C. Contract number: _____

D. Delivery date: Tentative: _____ Final: _____

II. PHYSICAL FEATURES

A. Sub-assemblies:

1. Number of sub-assemblies: 1
2. Largest sub-assembly: Weight ____ lbs; ____" H x ____" W x ____" D
3. Heaviest sub-assembly: Weight ____ lbs; ____" H x ____" W x ____" D

B. Assembled instrument:

1. Number of major components: 1
2. Largest component: Weight 600 lbs; 50" H x 62" W x 31" D
3. Heaviest component: Weight ____ lbs; ____" H x ____" W x ____" D
4. Total floor space required after assembly, including maintenance access space. ___Ft. ___In. High x ___Ft. ___In. Wide x ___Ft. ___In. Deep.
5. Total weight of assembled instrument: 600 lbs.

C. Type of base of mount: Flat ____; 3-point suspension ____; 4-point suspension ✓

D. Does the instrument have built-in mobility? Yes ✓ No ____

E. Is the instrument particularly sensitive to vibration? Yes ✓ No ____
Will the instrument generate vibration? Yes ____ No ✓

F. Are any special or unusual tools or fixtures necessary or adviseable for the installation of the maintenance of this instrument? Yes ____ No ✓.
If "Yes," please describe: _____

III. UTILITIES

A. Electrical:

	AC	DC
1. Voltage	115 Volts / 10 Volts	____ Volts / ____
2. Current	15 Amps/phase MAX	____ Amps
3. Frequency	60 cps	
4. Nr. of phases	1 Ph	
5. Nr. of wires	3	
6. Power required	____ Watts	____ Watts
7. Power factor	____ (Leading) (Lagging)	

8. Type of outlet: Two prong ___; three prong ✓; Twist lock ___; Perm.___
9. Type of ground: Building conduit ✓; Direct earth ground ___.
10. Should the instrument be shielded, either from external electromagnetic signals or to prevent interference with other equipment? Yes ____ No ✓
If "Yes," to what extent? _____

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B. Air conditioning:
1. Desired environment: Room air temperature of 70 °F +10 −5 °F and relative humidity of 45 % + 5 − % .
2. Input Air: Is a direct connection necessary? Yes ___ No X ; Adviseable? Yes ___ No ___ ; If "Yes," what is the connector type and size? _____ Recommended input air temperture ___ °F + ___ °F. Relative humidity ___ % + ___ %. If input air must be filtered, what is the maximum particle size in microns? ___ What particle count? _____/ cu. ft.
3. Output Air: Is a direct connection to the return air duct necessary? Yes ___ No X . Adviseable? Yes ___ No ___ . Connector type and size? _____ . Output air temperature 100 °F + 5 − °F. Relative humidity ___ % + ___ %. Output heat 800 BTU/Hr. Flow of ___ CFM. Is output air toxic? Yes ___ No X ; Noxious? Yes ___ No X .

C. Plumbing:
1. Is water required? Yes ___ No X ; Pressure ___ PSIG, flow ___ GPM.
2. Type of water required:
Tap ___ °F + ___ °F Deionized ___ °F + ___ °F
Tempered ___ °F + ___ °F Filtered ___ °F + ___ °F
If filtered, give maximum permissible particle size in microns and the maximum permissible count. _____ microns _____ particles/cu. ft.
3. Pipe required:
Galvanized ___ Copper ___ Size ___
Stainless Steel ___ Plastic ___ Type of connector ___
4. Floor drain:
Diameter of drain ___ Galvanized drain? ___
Plastic drain? ___ Glass drain? ___
5. Are any chemical solutions used in the device? Yes ___ No ___ . If "Yes," state the nature of the solution(s), permissible temperature range, flow rate in appropriate units and the filtration necessary for each solution _____ .
6. Size of pipes and connectors _____ .

D. Compressed air:
Is compressed air required? Yes ___ No X . Water free? ___ Oil Free? ___
Type and size of connector? _____ . Pressure ___ PSIG. Flow in CFM
Maximum ___, minimum ___, average ___ .

E. Vacuum:
Is vacuum required? Yes ___ No X . Pressure ___ PSIA or (inches of water) (millimeters of mercure). Displacement in CFM, maximum _____, minimum _____, average _____ . Type and Size of connectors _____ .

F. Peripheral Devices:
Will the instrument be connected to any peripheral devices such as a computer or data input or data output device? Yes ___ No X . If "Yes," give, in detail, the nature of the connection to the peripheral device such as coaxial cable, multiple wire connector, etc.

IV. REMARKS
A. Use additional sheets if more space is required for environmental conditions or utilities not mentioned above.
B. Submit three typed copies of the completed form to the Technical Representative.

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C. Attach three copies of a dimensioned outline drawing of each major component and of the completed assembly. Include the estimated weight of each major component and of the completed assembly. Indicate, on the outline drawing of the completed assembly, the space required for access to the instrument for maintenance.

D. If a question does not apply to the instrument, insert "N/A" (Not Applicable) in the appropriate blank space.

25X1

(Position or job title)

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